2/26/02

TIMSS-R 1999 Secondary Analysis
State of Idaho

STUDENT SURVEY						
How often does this happen in your mathematics lessons?						
	Almost always	**Pretty often**	**Once in a while**	**Never**	**SIG. TEST**	
a) The teacher shows us how to do mathematics problems.						
Math Achievement Score	500.8	482.6	464.2	411.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Algebra	508.6	493.3	463.9	446.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Geometry	475.0	471.6	447.6	446.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	513.9	507.2	490.0	447.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						

Measurement	491.6	477.4	459.5	429.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	509.7	487.0	475.4	440.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
b) We copy notes from the board.						
Math Achievement Score	489.9	491.3	508.4	487.7	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Algebra	499.0	500.5	516.1	494.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Geometry	476.6	470.1	478.3	454.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Fractions and number sense	506.1	508.2	520.6	508.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Measurement	480.5	481.9	500.2	485.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	498.3	501.6	514.5	499.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
c) We have a quiz or test.						
Math Achievement Score	484.7	509.2	485.4	444.1	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Algebra	495.0	516.4	490.1	469.6	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						

Geometry	466.4	480.9	468.4	439.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Fractions and number sense	503.4	521.8	500.6	479.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Measurement	482.5	497.5	471.6	453.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	495.5	513.7	499.8	450.8		
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
d) We work on mathematics projects.						
Math Achievement Score	468.7	477.9	506.7	503.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						

Algebra	479.9	490.2	512.4	510.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Geometry	460.1	468.4	480.2	472.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	492.5	504.1	516.9	516.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Measurement	468.7	473.1	493.5	495.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	477.7	495.3	511.5	512.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						

e) We work from worksheets or textbooks on our own.						
Math Achievement Score	501.6	484.2	479.3	459.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Algebra	508.6	495.0	489.7	478.8	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Geometry	475.5	471.0	458.8	463.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	514.8	504.8	501.6	486.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Measurement	493.0	478.1	472.0	450.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						

Data representation, analysis, & probability	509.0	499.5	485.7	461.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
f) We use calculators.						
Math Achievement Score	496.4	500.6	496.2	470.8	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Algebra	505.8	504.7	506.1	483.1	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Geometry	473.4	481.8	468.1	455.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Fractions and number sense	511.6	518.1	510.2	487.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Measurement	492.4	488.3	485.5	466.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Data representation, analysis, & probability	503.3	509.2	504.9	486.6	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
g) We use computers.						
Math Achievement Score	412.3	448.4	507.4	498.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Algebra	435.7	466.0	512.0	505.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Geometry	448.2	449.1	488.2	471.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	✓		
Once in a while				✓		
Never						

Fractions and number sense	453.5	487.3	521.1	511.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Measurement	450.8	451.3	491.6	489.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	440.7	459.8	515.3	505.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
h) We use things from everyday life in solving mathematics problems.						
Math Achievement Score	480.5	498.2	508.3	481.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Algebra	492.7	506.2	514.0	489.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Geometry	465.0	476.9	480.5	457.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Fractions and number sense	497.9	514.6	521.4	499.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Measurement	479.4	488.66	493.3	482.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	493.8	505.0	514.3	490.1	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
i) We work together in pairs or small groups.						
Math Achievement Score	485.5	492.0	505.1	483.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						

Algebra	497.9	505.4	508.3	495.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Geometry	470.9	468.4	479.5	464.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Fractions and number sense	504.4	510.3	518.9	498.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Measurement	483.1	485.8	493.2	477.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Data representation, analysis, & probability	499.8	501.0	511.0	493.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						

j) The teacher gives us homework in class.						
Math Achievement Score	504.0	482.8	487.5	443.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Algebra	511.1	492.3	494.5	468.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Geometry	480.0	462.8	460.2	443.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	517.9	500.0	504.4	475.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Measurement	494.3	480.5	477.2	439.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Data representation, analysis, & probability	510.4	494.9	495.7	472.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often						
Once in a while						
Never						
k) We can begin our homework in class.						
Math Achievement Score	501.2	488.7	471.5	474.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Algebra	508.1	499.8	483.7	487.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Geometry	476.6	468.3	455.9	465.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	515.3	508.8	490.3	491.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						

	Almost always	Pretty often	Once in a while	Never		
Measurement	492.3	477.0	478.2	457.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	509.9	497.2	479.7	475.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						
l) The teacher checks homework.						
Math Achievement Score	492.4	485.2	511.3	491.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Algebra	500.1	496.6	517.6	502.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Geometry	476.1	463.7	477.2	463.8	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						

Fractions and number sense	507.0	504.2	524.7	510.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Measurement	485.2	480.1	497.3	485.8	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	501.3	497.3	514.8	503.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
m) We check each other's homework.						
Math Achievement Score	503.7	490.6	483.2	488.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Algebra	508.4	501.8	497.7	498.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						

Geometry	473.8	471.4	469.4	475.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	517.2	510.5	499.0	504.9	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Measurement	493.4	483.5	476.7	483.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	511.4	498.1	496.3	496.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
n) We discuss our completed homework.						
Math Achievement Score	498.2	500.4	495.3	474.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						

Algebra	506.4	506.4	504.5	487.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Geometry	478.7	472.1	470.5	455.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Fractions and number sense	511.3	515.6	512.4	498.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Measurement	489.5	489.0	490.3	469.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Data representation, analysis, & probability	508.1	506.0	502.7	486.7	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while			NS	✓		
Never						

o) The teacher uses the board.						
Math Achievement Score	503.3	475.3	485.9	479.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Algebra	509.6	489.6	494.0	495.2	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Geometry	476.4	462.2	470.0	471.1	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	517.2	500.4	501.7	488.8	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Measurement	492.8	473.0	485.0	466.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	NS		
Once in a while				✓		
Never						

Data representation, analysis, & probability	511.0	487.0	496.1	484.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
p) The teacher uses an overhead projector.						
Math Achievement Score	488.9	478.2	511.5	506.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Algebra	497.1	490.5	519.0	513.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Geometry	473.8	465.5	476.8	472.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	502.7	503.6	523.4	522.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						

Measurement	481.6	473.7	497.8	500.2	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	497.5	497.0	515.5	511.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
q) Students use the board.						
Math Achievement Score	463.5	502.6	505.2	484.8	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Algebra	477.4	514.2	509.9	495.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Geometry	461.5	474.7	478.6	464.6	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Fractions and number sense	487.7	519.8	518.3	500.6	NS	
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Measurement	468.5	494.5	494.4	476.3	NS	
Almost always		✓	✓	NS		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Data representation, analysis, & probability	471.0	505.6	514.6	496.8	NS	
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				✓		
Never						
r) Students use the overhead projector.						
Math Achievement Score	440.3	454.7	505.6	500.9	✓	
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Algebra	462.4	475.1	511.9	507.3	✓	
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						

Geometry	450.9	463.2	482.6	472.0	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Fractions and number sense	469.5	485.8	520.2	514.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Measurement	462.0	453.8	490.8	492.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	449.2	465.3	514.7	509.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				NS		
Never						
s) The teacher gets interrupted by messages, visitors, etc.						
Math Achievement Score	463.3	475.4	509.7	484.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				✓		
Never						

Algebra	474.8	486.0	515.7	497.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Geometry	457.9	454.8	481.8	469.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Fractions and number sense	488.9	495.1	521.6	504.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Measurement	468.0	478.4	494.9	480.8	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	468.0	495.7	516.4	488.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						

t) The teacher uses a computer to demonstrate ideas in mathematics.						
Math Achievement Score	427.1	432.3	482.1	505.2	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Algebra	460.0	448.8	493.8	511.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Geometry	436.6	447.7	472.5	476.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Fractions and number sense	456.4	470.0	499.6	518.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Measurement	456.9	446.9	471.5	494.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Data representation, analysis, & probability	441.0	440.2	496.8	512.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						

When we begin a new topic in mathematics, we begin by …						
	Almost always	**Pretty often**	**Once in a while**	**Never**	**SIG. TEST**	
a) Having the teacher explain the rules and definitions.						
Math Achievement Score	500.4	490.4	486.1	450.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Algebra	507.1	503.7	491.1	468.2	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	✓		
Once in a while				✓		
Never						
Geometry	475.4	470.9	463.3	456.5	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						

Fractions and number sense	515.0	505.8	506.4	475.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Measurement	490.7	485.2	480.3	452.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Data representation, analysis, & probability	509.1	497.9	495.1	465.7	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
b) Discussing a word problem related to everyday life.						
Math Achievement Score	482.6	491.5	508.6	493.9	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Algebra	491.9	498.9	518.6	499.2	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						

Geometry	468.3	475.0	475.2	471.1	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	500.0	509.1	522.6	507.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Measurement	476.4	488.0	494.8	486.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	495.5	498.9	516.1	501.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				✓		
Never						
c) Working together in pairs or small groups on a problem or project.						
Math Achievement Score	474.4	487.6	503.6	498.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						

Algebra	487.7	502.3	507.9	506.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Geometry	461.0	468.2	477.4	474.2	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Fractions and number sense	495.6	505.5	517.3	512.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Measurement	477.7	480.3	492.9	488.4	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	NS		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	483.9	497.1	511.5	507.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						

d) Having the teacher ask us what we know related to the new topic.						
Math Achievement Score	478.2	490.7	509.2	500.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	NS		
Once in a while				✓		
Never						
Algebra	490.4	500.4	515.6	505.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	NS		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Geometry	459.6	474.6	481.0	470.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	NS		
Pretty often			NS	NS		
Once in a while				✓		
Never						
Fractions and number sense	495.6	508.7	522.4	512.8	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						
Measurement	475.4	481.7	496.8	495.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			✓	NS		
Once in a while				NS		
Never						

	Almost always	Pretty often	Once in a while	Never		
Data representation, analysis, & probability	481.7	501.6	519.8	507.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			✓	NS		
Once in a while				✓		
Never						
e) Looking at the textbook while the teacher talks about it.						
Math Achievement Score	496.1	504.6	497.0	465.9	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Algebra	505.3	512.4	506.3	469.6	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Geometry	467.8	481.7	477.6	466.3	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	NS		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Fractions and number sense	510.3	519.3	513.3	488.8	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						

	Almost always	Pretty often	Once in a while	Never		
Measurement	488.3	493.0	488.4	466.6	NS	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
Data representation, analysis, & probability	504.6	512.8	504.1	478.5	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	NS	✓		
Pretty often			NS	✓		
Once in a while				✓		
Never						
f) Trying to solve an example related to the new topic.						
Math Achievement Score	502.4	493.9	484.2	457.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Algebra	510.3	501.9	492.8	471.4	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Geometry	477.4	472.4	464.0	449.1	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always						
Pretty often						
Once in a while						
Never						

Fractions and number sense	515.9	510.4	501.7	484.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	✓		
Once in a while				NS		
Never						
Measurement	492.3	486.1	477.3	464.3	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		NS	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						
Data representation, analysis, & probability	511.6	498.5	494.1	477.0	✓	
	Almost always	Pretty often	Once in a while	Never		
Almost always		✓	✓	✓		
Pretty often			NS	NS		
Once in a while				NS		
Never						